



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

0000000

REPLY TO THE ATTENTION OF.

MEMORANDUM

SE-5J

AUG 29 2001

DATE:

SUBJECT: ACTION MEMORANDUM - Request for an Emergency
Removal Action at the Polk Street Drum Site,
Chicago, Cook County, Illinois
(Site ID #B5Z9)

FROM: Brad Benning, On-Scene Coordinator
Emergency Response Section II

TO: Richard Karl, Chief
Emergency Response Branch

THRU: William Bolen, Chief
Emergency Response Section 2

I. PURPOSE

The purpose of this memorandum is to request and document your verbal approval to expend up to \$154,080 in order to abate an imminent and substantial threat to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances located at 4547 West Polk Street, Chicago, Cook County, Illinois (the "Site"). The hazardous substances consist of flammable liquids, organic solvents, polychlorinated biphenyls (PCBs), lead, chromium, and barium contained in approximately 150 55-gallon drums located at the south end of this property. Elevated levels of the heavy metals were also detected in the soils in the general area of the drums.

EPA Region 5 Records Ctr.



245221

The proposed response action will mitigate threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances on the surface of the Site. Proposed removal actions include, but are not limited to, the assessment and stabilization of chemical hazards at the Site, and the excavation and off-site disposal of the hazardous substances. The presence of hazardous substances located at the Site, the potential for migration off-site, the unrestricted access to the property, and the Site's proximity to residential areas require that this removal be classified as an emergency action. The project will require an estimated fifteen 10-hour on-site working days to complete.

The Site is not on the National Priorities List ("NPL")

II. SITE CONDITIONS AND BACKGROUND

The CERCLIS ID number for the Site is ILN000508200

Site Description

1. Removal site evaluation

The initial site investigation was conducted by the Chicago Department of Environment ("CDOE") in July of 2001, after the Department of Streets and Sanitation discovered the drums during a City ordered cleanup of the property. Approximately 150 drums in various stages of deterioration were located along the railroad embankment at the south end of the property. Many of the drums were open and had released their contents of what appeared to be paints and resins to the ground. Samples collected by CDOE indicated that some of the drum contents contained flammable liquids and PCB concentrations up to 1820 ppm. U.S.EPA inspected the site on July 13, 2001, and confirmed the site conditions and observations of the CDOE official. A site assessment was conducted and additional samples were collected along with photo documentation of current conditions. Analytical results confirmed some of the CDOE's results with four drums exhibiting flash points of 73.4 degrees, and soils on site exceeding 50 ppm of PCBs. In addition, heavy metals were elevated in several samples with the highest total levels for lead (75,000 ppm), chrome (13,000 ppm), and barium (1100 ppm). TCLP levels also exceeded RCRA standards for Hazardous Waste, (D008) in three of the samples.

2. Physical location

The property is located 4547 West Polk Street in Chicago, Cook County, Illinois. Coordinates for the site are latitude 41 degrees 52' 13" North and longitude 87 degrees 44' 21" West, based on the Landview III program. It is located in an urban neighborhood with surrounding residential and commercial areas. The area of concern for the purpose of this action is located in the southern end of the property, which is approximately 200 feet by 50 feet.

A Region 5 Superfund Environmental Justice (EJ) analysis has been prepared for the area surrounding the Site. This analysis is presented in Attachment IV. In Illinois, the low-income percentage is 27 and the minority percentage is 25. To meet the EJ concern criteria, the area within 1 mile of the Site must have a population that is twice the state low-income percentage or/and twice the state minority percentage. That is, the area must be at least 54% low-income and/or 50% minority. At this site, the low-income percentage is 44.0% and the minority is 100% as determined by Arcview or Landview III EJ analysis. Therefore, this site does meet the region's EJ criteria based on demographics as identified in "Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998".

3. Site characteristics

The property consists of a long and narrow lot with two small buildings. Residential homes are located to the east and south, a commercial business to the north, and an elevated railroad embankment along the west. The site had operated as an automobile junk yard, as the site was filled with cars and car parts. The drums were discovered by city crews while removing the cars and debris. The drums apparently have been on site for many years and appeared to have been involved in a fire at one time. The drums are located along the railroad embankment at the southwest corner of the property. Many of the containers have degraded and released material onto the ground. The materials appear to be paints, resins, solvents, and related debris. The City constructed a temporary fence along the east and north perimeter, but limited access would be possible along the railroad property.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Investigations at the site have been focused on the containers located in the southwest portion of the property, and adjacent soils. Analytical data have indicated that elevated levels of PCBs, lead, chromium, and barium have been released to the environment, and that flammable liquids present in the containers may pose a threat of fire and/or explosion.

5. Maps, pictures and other graphic representations

Please see Attachment IV

B. Other Actions to Date

1. Previous actions

Since the referral by CDOE to U.S. EPA on July 9, 2001, the Agency has been reviewing site files and analytical data to determine if an imminent and substantial threat to public health, welfare, and the environment exists at the Polk Street property.

2. Current actions

U.S. EPA inspected the Site on July 13, 2001, and observed the containers and spilled contents as described by CDOE. The site assessment confirmed the CDOE's concerns that hazardous substances were present at the site. U.S. EPA is currently conducting a title search of the property to identify any potential responsible parties (PRPs).

C. State and Local Authorities' Roles

1. State and local actions to date

The City of Chicago initially cleared the property of the junk cars and debris, and started to work on the drums. Heritage Environmental was hired to overpack the drums and arrange disposal. Twenty containers were overpacked and thirty drums sampled when the City concluded the project was growing beyond their financial resources. The City constructed a temporary fence at the site to limit access, and removed the initial twenty

overpacked drums. The State of Illinois presently is not involved in this project.

2. Potential for continued State/local response

The City has not been successful with their enforcement actions against the property owner of record, and believes a continued response to this incident will exceed their resources.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A removal action is necessary at the Polk Street Drum Site to abate the threat to public health, welfare or the environment posed by the release and potential release of hazardous substances. The NCP, 40 C.F.R. 300.415(b)(2), provides eight specific criteria for evaluation of a threat and the appropriateness of a removal action. Observations documented during the Site investigation indicate that the Site meets the following criteria for an emergency removal action:

A. Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or the food chain.

This factor is present at the Site due to the uncontrolled releases of hazardous substances from drums at the site which are contaminated with elevated levels of PCBs, lead, chromium, and barium. Lead was detected in the majority of the samples at concentrations much higher than the regulatory limit. Lead is considered a cumulative poison and poses an inhalation and ingestion hazard. Long-term exposure to lead can result in build-up in the body, an affect known as bioaccumulation. Prolonged exposure to lead could result in kidney damage, anemia, and decreased fertility. Elevated lead exposure before or during pregnancy may cause birth defects. Barium and chromium compounds also have various toxic affects ranging from dermatitis to recognized carcinogens of the lungs, nasal cavity and paranasal sinus.

B. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.

This factor is present at the Site due to the presence of approximately 150 drums which are degrading and have already released hazardous substances to the environment consisting of PCBs, lead, chromium, and barium. The remaining drums continue to pose a threat of release to the environment.

C. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.

This factor is present at the Site due to the existence of approximately 150 drums of paint waste and debris, many of which have degraded and released their contents to the surrounding soils. Heavy metals identified in the site soils will likely migrate due to erosion, wind, and precipitation factors.

D. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

This factor is present at the Site as many of the containers are open and have spilled material to the ground. Precipitation will cause additional material to be released from the containers, and allow material to migrate off the property to surrounding residential yards.

E. The threat of fire and/or explosion;

This factor is present at the Site as all four drum samples exhibited the characteristic of ignitability, with flash points at room temperature. An ignition source such as a lit cigarette could start the containers on fire.

F. The availability of other appropriate federal or state response mechanisms to respond to the release.

This factor is present at the Site as the local and state authorities do not have the financial resources to respond to the release of hazardous substances.

IV. ENDANGERMENT DETERMINATION

Given the current conditions at the Site and the nature of the hazardous substances on-site, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing and completing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment. The possibility of further releases of the hazardous substances presents a threat to the nearby population and the environment via the exposure pathways described in Section III.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

There are obvious emergency elements present at the Site. The hazardous substances are located in an unsecured site, and are located near commercial and residential areas, and must be immediately addressed. The proposed removal actions at the site would eliminate the imminent and substantial threats to human health, welfare, or the environment, as outlined in this memorandum.

The OSC proposes to undertake the following response actions to mitigate threats posed by the presence of hazardous substances at the Site:

- a. Develop and implement a site-specific work plan including a proposed time line.
- b. Develop and implement a site-specific health and safety plan.
- c. Establish and maintain site security measures during the removal actions, which may include security guard service.
- d. Develop and implement an air monitoring and sampling program during removal activities.
- e. Identify, sample and characterize the hazardous substances located at the site.
- f. Remove drums and excavate contaminated soil and debris and stage on-site, as necessary.

g. Bulk and consolidate wastes in preparation for off-site disposal to a U.S.EPA approved disposal facility.

h. Conduct confirmation sampling to ensure Agency cleanup goals are achieved.

All hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action for treatment, storage or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 CFR 300.440, 58 Federal Register 49215 (Sept. 22, 1993).

The removal action will be taken in a manner not inconsistent with the NCP. The OSC has begun planning for provisions of post-removal site control, consistent with the provisions of Section 300.415(1) of the NCP. It is envisioned that after implementation of this removal action, there will be no need for post-removal site control.

All applicable and relevant and appropriate requirements ("ARARs") of federal and state law will be complied with, to the extent practicable. A federal ARAR determined to be applicable for the Site is the RCRA Off-Site Disposal Policy. Any additional federal and state ARARs will be addressed to the extent practicable.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the Site which may pose an imminent and substantial endangerment to public health, welfare, or the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

The estimated costs to complete the above actions are summarized below. These activities will require an estimated fifteen 10-hour on-site days to complete. Detailed contractor costs are presented in Attachment II.

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS

Cleanup Contractor Costs	\$ 97,200
Contingency (15%)	14,580
Subtotal	\$ 111,780
START Costs	<u>10,000</u>
Total Extramural Costs	\$ 121,780
Extramural Contingency (15%)	<u>18,200</u>
TOTAL, EXTRAMURAL COSTS	\$ 139,980

INTRAMURAL COSTS

U.S.EPA Direct Costs	
\$30/hr x (150 Regional + 15 HQ)	\$ 4,950
U.S.EPA Indirect Costs	
\$61/hr x (150 Regional)	<u>9,150</u>
TOTAL, INTRAMURAL COSTS	\$ <u>14,100</u>
TOTAL, REMOVAL PROJECT CEILING	\$ 154,080

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

A delay or non-action at the Site may result in an increased likelihood of direct contact to human populations by the hazardous substances. Since the Site is accessible, the various threats to human health and/or the environment, pose a serious threat to the local population. Additionally, any delay or non-action will also increase the likelihood of contaminant migration off-site to the surrounding commercial and residential neighborhood.

VII. OUTSTANDING POLICY ISSUES

No significant policy issues are associated with the the Polk Street Drum site.

VIII. ENFORCEMENT

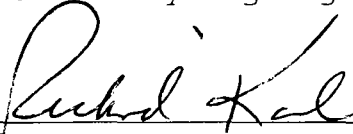
For Administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential addendum. (Attachment I)

IX. RECOMMENDATION

This decision document represents the selected removal action for the Polk Street Drum site, located in Chicago, Cook County, Illinois, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site (see Attachment III).

Conditions at the site meet the criteria of Section 300.415(b)(2) of the NCP for a removal action and I recommend your approval of the proposed removal action. The total estimated project ceiling, if approved will be \$154,080. Of this, an estimated \$129,980 may be used for cleanup contractor costs. You may indicate your decision by signing below.

APPROVE: _____


Chief, Emergency Response Branch

DATE: _____

8-29-01

DISAPPROVE: _____

Chief, Emergency Response Branch

DATE: _____

Attachments: I. Enforcement Confidential addendum
II. ERRS Contractor Estimate
III. Administrative Record
IV. Region 5 Superfund EJ Analysis

cc: C. Stanton, U.S.EPA, OERR, 5202G

Michael T. Chezik, U.S. DOI w/o Enf. Addendum

B. Everetts, Illinois EPA

Superfund Coordinator, w/o Enf. Addendum

ATTACHMENT I

ENFORCEMENT ADDENDUM

POLK STREET DRUMS SITE

AUGUST 2001

2 PAGES

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION

OF THE REMOVAL ACTION

ATTACHMENT II
ERRS CONTRACTOR COSTS
FOR THE
POLK STREET DRUM SITE
CHICAGO, ILLINOIS

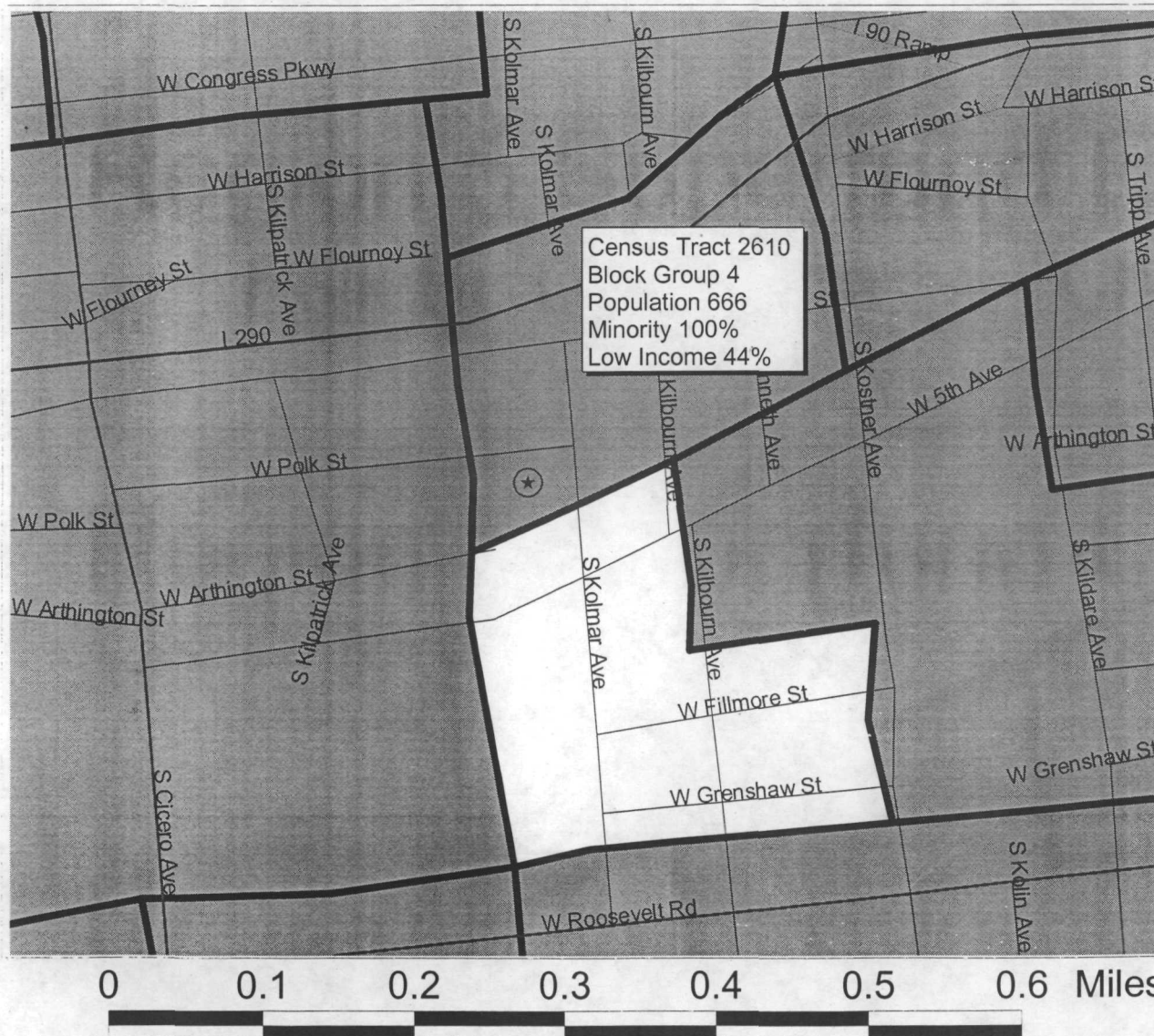
PERSONNEL	\$ 29,000
EQUIPMENT	4,700
ODC	23,000
TRANSPORTATION	3,000
DISPOSAL	<u>37,5000</u>
TOTAL	\$ 97,200

ATTACHMENT III**U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION****ADMINISTRATIVE RECORD
FOR
POLK STREET DRUM SITE
CHICAGO, COOK COUNTY, ILLINOIS****ORIGINAL
AUGUST 1, 2001**

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	06/29/01	Capifali, I., City of Chicago Department of Environment	U.S. EPA	Site Report for the Polk Street Drum Site w/ Attachments	16
2	00/00/00	Roy F. Weston, Inc.	U.S. EPA	Removal Assessment for the Polk Street Drum Site (PENDING)	
3	00/00/00	Benning, B., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for a Time- Critical Removal Action at the Polk Street Drum Site (PENDING)	

Region 5 Superfund EJ Analysis

Polk St. Drum Site Chicago, IL



EJ Identification

- Low Income and Minority Less than State Average
- Low Income or Minority at or Greater than State Average
- Low Income or Minority 2 Times or Greater than State Average [meets Region 5 EJ Case criteria]
- Site Location
- Block Group Boundary

Region 5 EJ Case Criteria for Illinois
 Minority: 50% or greater
 Low Income: 54% or greater



U.S. EPA Region 5
 Superfund GIS



Date of Map: 7/18/01

Source of Map: 1990 Census Database

**INDEPENDENT GOVERNMENT
COST ESTIMATE**

1 PAGE

HAS BEEN REDACTED

**NOT RELEVANT TO THE SELECTION
OF THE REMOVAL ACTION**